UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 5 2014

CERTIFIED MAIL 7012 1010 0002 0759 6946
RETURN RECEIPT REQUESTED

City of Lumberton
Attn.: Mr. Robert Armstrong, Jr.
Director of Public Works
215 South Cedar Street
Lumberton, North Carolina 28358

Re: Notice of Violation
National Pollutant Discharge Elimination System Permit No.: NC0024571
City of Lumberton Wastewater Treatment Plant

Dear Mr. Armstrong:

On September 26, 2013, the U.S. Environmental Protection Agency Region 4 sent an Information Request Letter (Request) pursuant to Section 308 of the Clean Water Act (CWA), 33 U.S.C. § 1318, to the City of Lumberton (the City) requesting information related to Sanitary Sewer Overflows (SSOs) from the City's Wastewater Collection and Transmission System (WCTS). On February 25, 2014, the EPA and the North Carolina Department of Environment and Natural Resources conducted a Compliance Evaluation Inspection (CEI) of the City's WCTS associated with the Lumberton Wastewater Treatment Plant owned and operated by the City. The inspection results are summarized in the enclosed CEI report.

The EPA's review of the City's response to the Request and the information gathered pursuant to the aforementioned CEI has revealed that the City has violated the CWA and requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit. Specifically, the EPA has determined that the City has violated the CWA and the NPDES Permit as follows:

> During the period of July 2008 to February 2014, the City had 75 SSOs totaling 169,340 gallons of untreated sewage that discharged from the City's WCTS to navigable waters of the United States as defined by Section 502 of the CWA, 33 U.S.C. § 1362. Such SSOs were not authorized by the NPDES permit and are therefore violations of Section 301(a) of the Act, 33 U.S.C. § 1311(a). In addition, the City had 17 SSOs totaling 13,660 gallons of untreated sewage that was released from the WCTS and that did not reach navigable waters of the United States. All 92 SSOs are indicative of the City's violation of Part II.C.2 of the City's NPDES Permit, which requires the City to properly operate and maintain its WCTS.

The EPA has decided not to initiate an enforcement action at this time. However, the City's future progress in developing and implementing written Management, Operations and Maintenance (MOM) programs, continued rehabilitation of the WCTS and progress towards eliminating SSOs will determine

if future EPA enforcement actions are warranted. The EPA will monitor the City's progress in developing and implementing MOM programs and WCTS rehabilitation over the next two years.

Until compliance with the CWA is achieved, the City is considered to be in violation of the CWA and subject to enforcement action pursuant to Section 309 of the CWA, 33 U.S.C. § 1319. This Section provides for the issuance of administrative penalty and/or compliance orders and the initiation of civil and/or criminal actions.

If you have any questions regarding this Notice of Violation, please contact Ms. Sara Schiff, of my staff, at (404) 562-9870 or by email at schiff.sara@epa.gov. You may also address written correspondence to Ms. Schiff at the above address on the letterhead.

Sincerely,

James D. Giattina
Director
Water Protection Division

Enclosure

cc: Mr. Jeff Poupart
North Carolina Department of Environmental and Natural Resources

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4
Water Protection Division
Clean Water Enforcement Branch

COMPLIANCE EVALUATION INSPECTION REPORT

Public Works Department
City of Lumberton
Robeson County
North Carolina
NPDES Permit No. NC0024571

Facility Address:
700 Lafayette Street
Lumberton, North Carolina 28358

Inspection Date:
February 25, 2014

Inspectors:
Sara Schiff, Enforcement Officer, EPA Region 4
Dennis Sayre, Enforcement Officer, EPA Region 4
Hughie White, Environmental Specialist, NCDENR – DWR
Trent Allen, Environmental Engineer, NCDENR – DWR

Inspection Report Prepared by:
Sara Schiff

April 15, 2014

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ABBREVIATIONS AND ACRONYMS

CEI	Compliance Evaluation Inspection
CSSAP	Continuous Sewer System Assessment Program
CWA	Clean Water Act
EPA	United States Environmental Protection Agency
FOG	Fats, Oils, and Grease
GIS	Geographic Information System
GPM	Gallons per Minute
I/I	Infiltration/Inflow
ICIS	Integrated Compliance Information System
IRP	Infrastructure Rehabilitation Program
MGD	Million Gallons per Day
MOM	Management, Operation, and Maintenance
NCDENR	North Carolina Department of Environment and Natural Resources
NPDES	National Pollutant Discharge Elimination System
PS	Pump Station
SORP	Sewer Overflow Response Plan
SSO	Sanitary Sewer Overflow
SUO	Sewer Use Ordinance
WCTS	Wastewater Collection and Transmission System
WWTP	Wastewater Treatment Plant

I. OVERVIEW

The Lumberton Water and Sewer Division provides drinking water and sanitary sewer services for residential, commercial and industrial entities within the City of Lumberton (the City), North Carolina. The City's Water and Sewer Division is also responsible for the operation and maintenance of one wastewater treatment facility, approximately 150 miles of sewer gravity line, 82 miles of force main, 41 pump stations and other sewer related appurtenances serving approximately 23,000 residents.

On September 26, 2013, the EPA sent a Information Request Letter (308 Letter) pursuant to Section 308 of the Clean Water Act (CWA), requesting information related to Sanitary Sewer Overflows (SSOs) from the Wastewater Collection and Transmission System (WCTS). The EPA received the City's response, dated October 22, 2013, to EPA's 308 Letter on October 23, 2013.

The EPA conducted a Compliance Evaluation Inspection (CEI) of the City's sewer system on February 25, 2014. The purpose of this CEI was to evaluate compliance with the CWA as it relates to SSOs from the sewer system and to assess the City's Management, Operations and Maintenance (MOM) programs. Additionally, the purpose of this compliance inspection was to examine the causes and potential corrective actions for SSOs from the WCTS.

During the inspection, the EPA requested written documentation of any MOM programs that the City may use to operate and maintain the WCTS. The EPA also discussed inspection and maintenance records, interviewed management personnel and visited various sites in the WCTS including Ed's Tire Pump Station (PS), Britt's Farm PS, Stephen's Park, Noir Street, and Stirling Drive. This report describes EPA's findings, provides an initial analysis of SSOs from the sewer system, identifies areas of concern and presents preliminary recommendations.

II. OBJECTIVES

The specific objectives of the inspection were to assess the City's compliance with the CWA, evaluate reported SSOs, assess the MOM programs, where implemented, and to examine the causes of SSOs in the City's sewer system.

III. INVESTIGATION METHODS

The investigation included:

- Review of the Integrated Compliance Information System - National Pollutant Discharge Elimination System (ICIS-NPDES) federal database, state documents and the NPDES Permit;
- Review of the City's response to the EPA's 308 Letter;
- Review of the City's NPDES permit and related documents;
- Interviews with the City's Water and Sewer Division personnel; and,
- Visual inspection.

IV. REGULATORY SUMMARY

The North Carolina Department of Environment and Natural Resources (NCDENR) is authorized under the CWA to implement the NPDES program in North Carolina. The Lumberton Wastewater Treatment Plant (WWTP) is authorized under NCDENR's NPDES Permit No. NC0024571 (the Permit) to discharge from its WWTP into the Lumber River in the Lumber River Basin. The WWTP's design capacity is 20 million gallons per day (MGD), with a maximum wet weather capacity of 30 - 35 MGD. In addition to this Permit, the City's WCTS is also regulated under the NCDENR System-Wide Wastewater Collection System Permit WQCS00024 (Collection System Permit).

The Lumber River is listed on the 2010 303(d) list as impaired for mercury based on fish consumption.

SSOs are prohibited discharges based on Sections 301 and 402 of the CWA which generally prohibit the discharge of pollutants by any person unless authorized by an NPDES permit. Part II.B.2 of the Permit requires the City minimize or prevent discharges, and Part II.C.2 of the Permit requires the City operate and maintain all components of the system to achieve compliance with the conditions of the Permit. The Collection System Permit states at Part I.2 that the collection system must be "effectively managed, maintained, and operated at all times so that there is no SSO to land or surface waters, nor any contamination of groundwater."

V. INSPECTION SUMMARY AND FINDINGS

The EPA performed a pre-inspection evaluation and an on-site inspection of the WCTS. The pre-inspection evaluation of the City's WCTS consisted of examining historic records submitted by the City to the EPA. This section will provide a summary of both means of inspection as well as any recommendations to the City to improve the WCTS performance.

A. Analysis of SSOs

Discharges to waters of the United States from sanitary sewer systems are prohibited unless authorized by an NPDES permit. In addition, overflows from the sewer system that do not reach waters of the United States can be indicative of a failure to comply with the proper operation and maintenance provisions of Parts II.B.2 and II.C.2 of the NPDES permit and Part I.2 of the Collection System Permit.

The City submitted to the EPA information related to SSOs that occurred from July 2008 through August 2013 in its 308 Letter response. The City also provided updated information related to SSOs that occurred from August 2013 until February 2014 after the CEI. The EPA analyzed the information and compiled results based on total number of overflows. The EPA also categorized the SSOs by cause, which included six categories: Blockage, Grease, Manhole Failure, Pipe Failure, Pump Station Failure, and Rain/Rainwater Surcharge. Table 1 and Figure 1 summarizes the information collected from the City's 308 Letter response and

the updated SSO data submitted to the EPA.

SSOs by Cause	Number
Blockage	4
Grease	6
Manhole Failure	2
Pipe Failure	9
Pump Station Failure	3
Rain/Rainwater Surcharge	68
TOTAL	**92**

Table 1: SSOs by cause.

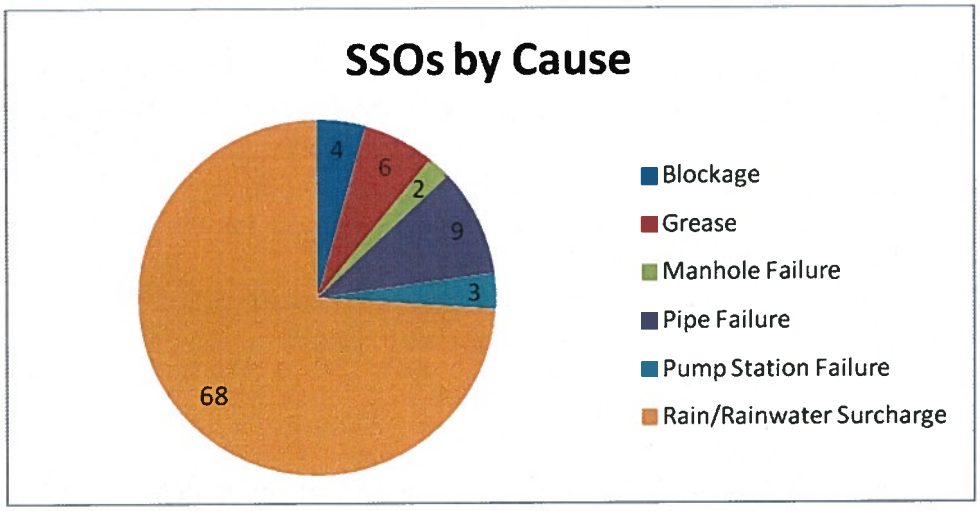

Figure 1: SSOs by cause.

The majority of the City's SSOs were caused by rain/rainwater surcharge. Portions of the City's WCTS also collect stormwater from various stormwater catch basins that is transmitted to the WWTP for treatment. Based on the City's 308 Letter response and updated SSO data, the EPA determined that the City had 92 reported total SSOs from July 2008 to February 2014.

The City did not report any building back-ups to the EPA.

Figure 2 is a map displaying the approximate location of the SSOs that the City reported to the EPA pursuant to the 308 Letter. An analysis of this map and SSO list indicates that there are a few potential problem areas with regards to SSOs, including Noir Street, Musselwhite Circle, Stirling Drive, Tartan Road, Ed's Tire PS, and Stephen's Park. Of these potential problem areas, Noir Street, Ed's Tire PS, and Stephen's Park have had at least one SSO since March 2013.

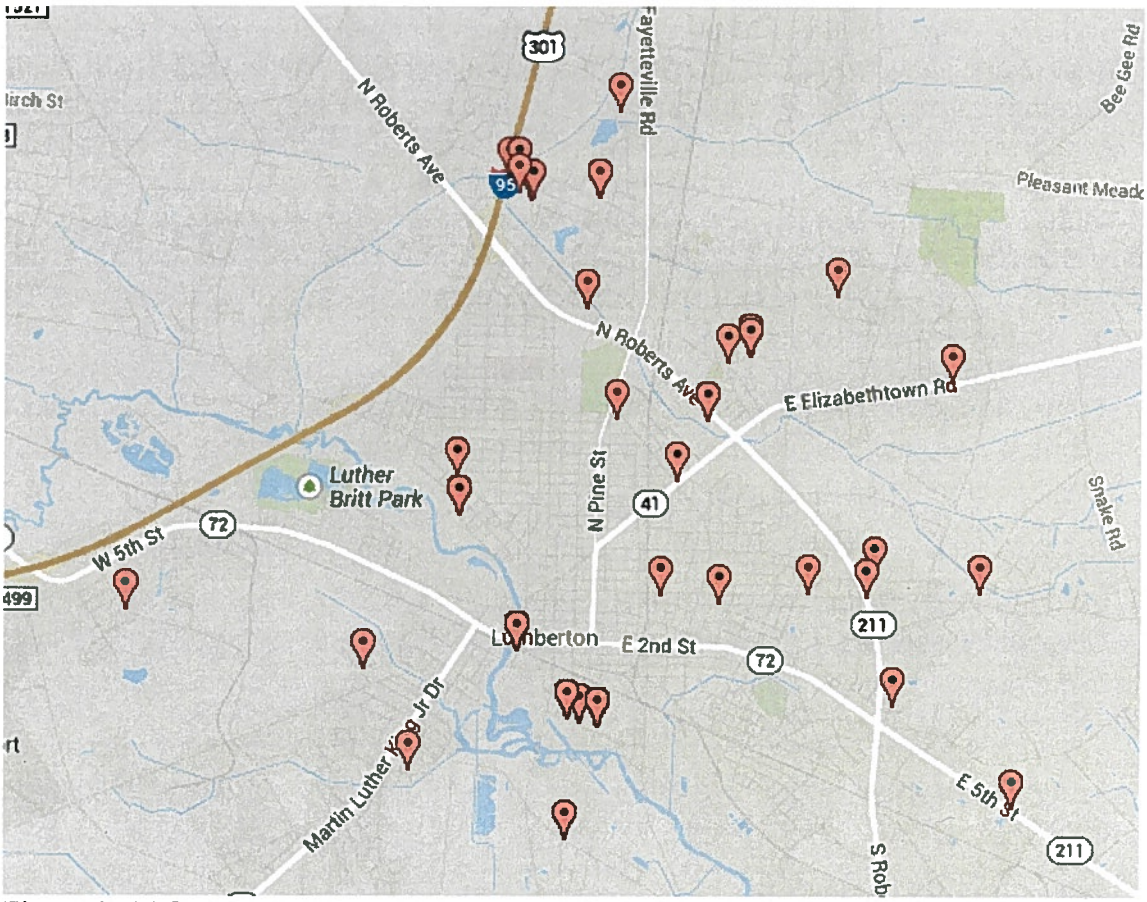

Figure 2: SSO map.

The City reported volumes for all 92 reported SSOs. The average SSO volume is 1,989 gallons per SSO.

Findings and Recommendations:

The EPA's initial data analysis indicated that the City was experiencing an average of 7.2 SSOs per 100 miles of sewer pipe per year, which is slightly higher than the typical SSO count found in other comparable cities. The EPA also re-examined the data to analyze only the SSOs that occurred in the past 5 years (from March 2009 – February 2014). This resulted in an average of 5.3 SSOs per 100 miles of sewer pipe per year, which would be more in-line with the typical SSO count found in other comparable cities.

During the inspection, the City indicated that they have designed multiple projects to remove stormwater from the WCTS to reduce the amount of wet weather flow to the WWTP and reduce the number and volumes of SSOs since 1999. Some of these projects are in different stages--some have been completed and others are ongoing or are currently in the design phase. One of the completed projects, the Northeast Interceptor Project, addressed SSOs at two of the potential problem areas referenced above—Stirling Drive and Tartan Road. There have not been any SSOs reported at either location since 2010, although the manhole inspected on Stirling Drive may have shown evidence that small volume SSOs may still be

occurring. The City should inspect this manhole after rain events to ensure that the projects implemented have eliminated the SSOs that previously plagued this area. There are three ongoing projects, Phase III, Britt's Farm Rehabilitation, and Tanglewood Rehabilitation, and one future project, the Ramada Inn Lift Station Diversion, which are intended to completely separate any storm water catch basins remaining in the system that the City believes will address SSOs at remaining problem areas listed above—Noir Street, Ed's Tire Pump Station, and Stephens Park.

B. Management Interview

The EPA met with the City's Director of Public Works (the Director), Deputy Director of Public Works, and two NCDENR staff members at 8:00 a.m., February 25, 2014, at the City's Public Works office. Topics of discussion during the meeting included an SSO review, the use and documentation of any MOM programs, including Mapping, Sewer Overflow Response Plan (SORP), Preventive Maintenance Programs, Operations Programs, Continuous Sewer System Assessment Program (CSSAP), Capacity Assurance Program, and Fats, Oil, and Grease (FOG) Control. The EPA also discussed citizen complaints and record keeping.

The EPA discussed concerns relating to SSOs in detail with the Director and inquired about each program listed above to determine whether a formal or non-formal (not in writing) program existed to manage various maintenance and operations needs of the WCTS.

The City has approximately 80 percent of its WCTS mapped in a geographic information system (GIS)-based map. The remainder of the mapping efforts are currently planned and contingent upon funding. The map includes pipe sizes, inverts, material type, and manholes; however, some information is missing because portions of the GIS map are generated from AutoCADD drawings. The City is scheduled to begin the next phase of mapping in July 2014. The City's Sewer Department uses a contractor to gather the information to add to the GIS map, and the Planning Department is using a different contractor to maintain the GIS map. There are no written protocols for maintaining the GIS map or to ensure new additions to the WCTS are added to the GIS map, although the City was able to adequately discuss the procedures used.

The City has also developed and implemented a SORP. The SORP includes information on responding to and cleaning up an SSO, notification to NCDENR procedures, available equipment, important contact information, emergency contractors and suppliers, and NCDENR contact information. The SORP does not include guidance on estimating SSO volume. The City has two vac-trucks that can be used to respond to SSOs. One of these vac-trucks is typically used for storm system work and maintenance, but is available if needed. The City also has a variety of bypass pumps, two camera trucks, excavation and trenching equipment, spare pipes, manholes, and fittings, and generators to respond to SSOs.

The City has 41 pump stations throughout the WCTS. Of the 41 pump stations, 22 have onsite emergency back-up power. The City also has one portable generator that is only used

for pump station use. The portable generator is adequate to run the City's largest pump stations. The City does not appear to have formal written preventive maintenance or operations programs, but the City uses pump run times to determine maintenance needs and cleans grease-prone wet wells every six months. The City also regularly inspects the pump stations and periodically exercises the valves. City staff appears capable of handling pump station and emergency operations.

The City does not have a formal CSSAP. The City is performing pieces of a typical CSSAP, such as periodic wet well and manhole inspections.

The City does not have a formal, separate root control program because roots have not been an issue for the City's WCTS.

The City does not have a formal capacity assurance program. There are capacity requirements for projects that extend public sewer to more than one building. The City works with the developer of smaller projects to ensure capacity.

The City's FOG program is run through its pretreatment program. The City's Planning Department and Inspections Division permits grease traps. The City inspects grease traps at least once a year, and the Sewer Use Ordinance (SUO) grants the City enforcement authority.

During normal business hours, citizen complaint calls go the Public Works' front office. The complaint is documented on a work order form, and the work order is not closed out until the work has been completed. The call-in number is not publicized. Many customers call Lumberton's City Hall, and the calls are directed to Public Works. Outside of normal business hours, complaints that are not emergencies or do not include health risks are responded to the next morning. If the complaint is an emergency, health risk, or from a business, the City will respond on a 24 hour basis. The City has a two man crew with a vac-truck on-call for 24-hour response. The City does not track any complaints electronically or on a map.

Work orders are only kept in paper-form. They are not electronically tracked. Work orders stay with the assigned crew until the work has been completed. A carbon copy of the work order is kept in a separate folder. The carbon copy could be used to verify the work was completed.

The City maintains cleaning and CCTV logs in log books in the sewer flusher truck. Multiple cleanings of the same pipe segment are counted toward the total length of pipe cleaned multiple times. The City believes the entire WCTS is most likely not cleaned every 10 years, but more than 10 percent of the WCTS is cleaned annually.

C. Site Inspection

The EPA performed an on-site inspection of five of the potential problem areas (Noir Street, Ed's Tire Pump Station, Stephen's Park, Mussellwhite Circle, and Stirling Drive) and the

Britt's Farm Pump Station.

Figure 3 below shows a manhole located at 515 Noir Street. This line carries combined sanitary sewer and stormwater, and there have been at least 25 SSOs from manholes located along Noir Street since July 2008. At the time of the inspection, the pipe in the manhole was approximately 90% full. According to the City, approximately 60% of the City's total flow and all of the City's combined flow goes through this line. Note the debris along the sides of the manhole.

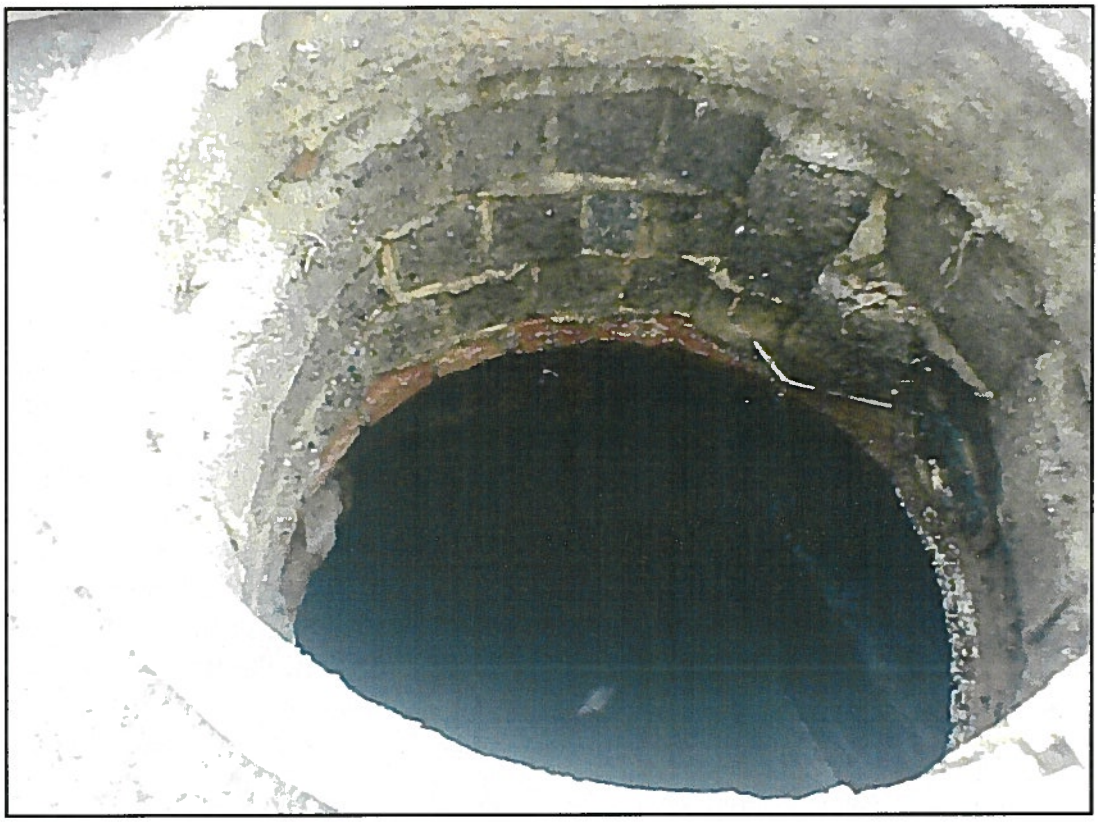

Figure 3: Manhole at 515 Noir Street.

After inspecting Noir Street, the EPA inspected Ed's Tire PS. This pump station is the largest capacity pump station outside of the WWTP. The outside of the pump station appear well maintained. The pump station has an information sign and emergency light. The pump station also has a SCADA system and permanent generator. There was no grease accumulation inside of the wet well. The City maintains a log book inside of the pump station that tracks visits, operations and maintenance logs, and alarms. The generator is tested twice per month. The EPA also inspected a manhole located just outside of the pump station fence, shown in Figure 4 below. There was debris around the manhole, which is indicative of recent overflows. Note the heavy flow of wastewater through the manhole.

Figure 4: Manhole located just outside of the fence at Ed's Tire Pump Station.

Figures 5 through 7 below are of the Britt's Farm Pump Station. The outside and inside of the pump station look well maintained, as shown in Figures 5 and 6. The pump station has an information sign and emergency light. The pump station also has a SCADA system and permanent generator. The City maintains a log book inside of the pump station that tracks inspection visits, operations and maintenance logs, and alarms. The pump station's wet well is shown in Figure 7. The City stated the sewer line connected to the pump station will be slip-lined as part of the Britt's Farm Rehabilitation Project.

Figure 5: Britt's Farm Pump Station.

Figure 6: Inside of Britt's Farm Pump Station.

Figure 7: Wet well at Britt's Farm Pump Station.

Two manholes at Stephen's Park were inspected. The first manhole, shown in Figure 8, had low flow during the inspection. The City stated this manhole used to overflow often, but that it has not overflowed in awhile. Note there is no debris along the sides or on top of the ladder rungs of the manhole. The second manhole inspected had a lot of flow during the inspection. There was a slight accumulation of debris on top of the ladder rungs. Note the manhole crown was loose and off center.

Figure 8: View inside first manhole inspected at Stephen's Park.

Figure 9: Second manhole inspected at Stephen's Park.

Figures 10 and 11 below are of a manhole located on Stirling Drive. Figure 10 is of the manhole cover, and Figure 11 is a view inside of the same manhole. There was low flow through the manhole during the inspection. Figure 11 shows corrosion on the underside of the manhole cover and buildup of debris on the sides and on top of the ladder rungs of the manhole. The EPA believes that this manhole may have recently experienced a low volume SSO due to the appearance of the lack of fine debris around the manhole indentations (used to place a removal tool) as noted in Figure 10. Lack of debris in this location is indicative of sewage pushing up through the manhole lid. The City had experienced a significant rainfall event just prior to EPA's inspection.

Figure 10: Manhole on Stirling Drive.

Figure 11: View inside manhole shown in Figure 10.

Figure 12 below is a view inside a manhole on Musselwhite Circle. Musselwhite Circle is in the middle of a City Housing Authority development. The City stated the SSOs from this area are mostly due to tenants putting things in the WCTS that cause clogs. The City has tried outreach to combat the problem, but there is high tenant turnover. As shown in the picture, the manhole is shallow, full of paper and grease, and has low flow during the inspection.

Figure 12: View inside manhole at Musselwhite Circle.

D. Conclusion

The City's personnel appear to be actively maintaining the system; however, there are some deficiencies noted above. The City has not developed and implemented many formal MOM programs, even though they are currently performing most of the work included in the MOM programs.

The City maintains that SSOs on Stirling Drive have been eliminated from recently completed projects; however, evidence discovered during inspection may indicate that wet weather capacity issues are still occurring in this area. The City should inspect this area after rain events and take appropriate action where capacity is deficient during wet weather.

The City presented project plans and schedules to address the remaining wet weather capacity issues that have plagued the system in the past; most importantly, eliminating the storm water inflow from the existing catch basins in the downtown area. The City should expedite implementing these projects and perform post construction inspections to verify that these

plans adequately address wet weather capacity, including visual inspections, smoke testing and any other means available using best engineering practices.

Electronic tracking of complaints and cleaning and inspection of pipes are not one of the City's priorities. The EPA strongly recommends that the City adopt an electronic program to track and maintain records of citizen complaints and work orders as well as an electronic mapping capability to track cleaning and inspection efforts to ensure permit requirements as well as take advantage of various other aspects of maintaining such systems such as trend analysis and planning.

Management, Operations, and Maintenance Programs

The EPA noted several preventive maintenance procedures that the City is utilizing that are in keeping with best management practices to operate and maintain the system; however, the EPA recommends that the City develop formal written programs for these preventive maintenance procedures and programs. Developing formal written programs will aid the City in refining these programs, which should increase efficiency of the programs and provide guidance for the implementation of these programs that can be passed down to the next maintenance generation.

MOM Program development guidance documents can be found on EPA, Region 4's website at http://www.epa.gov/region4/water/wpeb/momproject/. Recommended MOM programs include:

a. Mapping Program

Formal Mapping Program documentation should be developed to ensure consistency of map protocol and to provide official guidance for map review and maintenance.

b. Grease Control Program

The EPA recommends that the City develop documents that outline procedures and provide guidance on how to manage and reduce FOG build-up in the WCTS. A valid FOG program includes providing guidance documents for permitting, inspection, enforcement, compliance tracking, budgeting, establishing inspection priorities, public education guidance and performance goals and provide specific grease control obligations for food service establishments in accordance with City ordinances. Formal FOG program development should include a review of the City's ordinances to ensure that the appropriate Water Management Department personnel have the ability to adequately enforce FOG related ordinances.

c. Capacity Assurance Program

The EPA recommends that the City develop a formal Capacity Assurance Program that includes specific criteria for approval of additions to the system balancing Permit

requirements and the City's codes and ordinances; performance measures used to approve or deny an extension of the collection system; and procedures used to calculate capacity in the collection system and at the treatment plant.

d. Preventive Maintenance and Inspection Programs

The EPA recommends that the City develop formal written MOM Programs with an aggressive Preventive Maintenance and Inspection Program that defines goals for cleaning and inspection activities and pump station preventive maintenance activity, including:

A **Gravity Line Preventive Maintenance Program**. The Gravity Line Preventive Maintenance Program should include the following components: 1) blockage abatement mechanisms (including both hydraulic and mechanical cleaning); 2) root control mechanisms; 3) debris control mechanisms, and 4) manhole preventive maintenance procedures. This program should include the following activities: 1) identification of, and provision for, all personnel and equipment needed; 2) determination of the frequency; 3) establishment of procedures; 4) establishment of priorities for scheduling; 5) the use of standard forms; 6) establishment of record keeping requirements; 7) establishment of performance measures; and 8) integration of all data collected under the program with other information management systems.

A **Continuing Sewer System Assessment Program (CSSAP)**. The CSSAP should establish procedures for setting priorities and schedules for undertaking the WCTS assessment including: 1) corrosion defect identification; 2) routine manhole inspections; 3) flow monitoring; 4) CCTV activities; 5) gravity system defect analysis; 6) smoke testing, and 7) pump station performance and adequacy analysis. The CSSAP should provide for the assessment of at least ten percent (10%) of the WCTS on average per year, resulting in the assessment of the entire WCTS at least once every ten years, and establish priorities and schedules taking into consideration the nature and extent of customer complaints; flow monitoring; location and cause of SSOs and WCTS deficiencies; any remediation work already ongoing; pump station run times; field crew work orders; any preliminary sewer assessments, such as flow monitoring results; community input; and any other relevant information.

A **Infrastructure Rehabilitation Program (IRP)**. The IRP should establish procedures for setting priorities and schedules for undertaking rehabilitation of the WCTS. The IRP should address Infiltration/Inflow (I/I), structural issues in the WCTS, and the other conditions causing SSOs, with the goal of eliminating future SSOs. The IRP should take into account all previous information the City has gathered including any information gathered pursuant to the CSSAP. The IRP should also establish standard procedures to analyze the effectiveness of completed rehabilitation projects.

A **Pump Station Operations and Preventive Maintenance Program**. The Pump Station Operation and Preventive Maintenance Program should include or address the following items/components described below:

i. Pump station operations at pump stations that are to be conducted on a routine, scheduled basis. The program should define the standard pump station operating procedures to be followed at each pump station such as reading and recording information from the elapsed time meters, recording information from the pump start counters, observing wet well conditions and grease accumulation, checking and re-setting, as necessary to improve system performance, wet well set points, checking and recording system pressure, checking SCADA components, checking alarms and stand-by power and identifying maintenance needs.

ii. Emergency pump station operations procedures. The program should address pump station operations at pump stations that are to be conducted as a result of equipment failure or loss of electrical power. The program should define the emergency pump station operating procedures to be followed at each pump station such as calling for emergency maintenance, initiating stand-by power by bringing in portable generators or initiating portable pump operations for pump around.

iii. The program should establish schedules, routes, priorities, standard forms and reporting procedures and establish minimum acceptable performance measures and condition grading criteria.

Preventive Maintenance and Inspection Rehabilitation Programs can have a significant positive impact on the future condition of the WCTS. A properly implemented Preventive Maintenance and Inspection Rehabilitation Program can prevent a massive outlay of expenses needed to repair or replace parts of the system that City personnel 'did not see' failing due to the lack of prevention. Relatively small preventive maintenance expenses now can save the City larger repair expenses in the future. Formal guidance can also be used to educate City officials, such as the Mayor and City Aldermen responsible for funding decisions and the allocation of resources essential to proper operation and maintenance of the utility.

e. Sewer Overflow Response Plan

The EPA recommends that the City update its existing SORP to include procedures for estimating SSO volumes.